PERMIT NO. 2869-151-0065-S-01-0
ISSUANCE DATE:

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality Permit

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to and in effect under that Act,

Facility Name:	**Nexus Circular - McDonough Facility**
Facility Address:	**201 King Mill Court** **McDonough, Georgia 30253 Henry County**
Mailing Address:	**500 Waterfront Dr. SW** **Atlanta, Georgia 30336**
Facility AIRS Number:	**04-13-151-00065**

is issued a Permit for the following:

Construction and operation of an Advanced Plastics Recycling facility.

This Permit is issued for the purpose of establishing practically enforceable emission limitations such that the facility will not be considered a major source with respect to Title V of the Clean Air Act Amendments of 1990.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 28698 dated January 19, 2023; any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **7** pages.

STATE OF GEORGIA
CONSTITUTION
WISDOM JUSTICE MODERATION
1776

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Richard E. Dunn, Director
Environmental Protection Division

1. General Requirements

1.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate this source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection or surveillance of the source.

1.2 The Permittee shall not build, erect, install or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged into the atmosphere.

1.3 The Permittee shall submit a Georgia Air Quality Permit application to the Division prior to the commencement of any modification, as defined in 391-3-1-.01(pp), which may result in air pollution and which is not exempt under 391-3-1-.03(6). Such application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. The application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity and pollutant emission rates of the plant before and after the change, and the anticipated completion date of the change.

1.4 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and shall be retained for at least five (5) years following the date of entry.

1.5 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.

2. Allowable Emissions

2.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility volatile organic compounds (VOC) emissions exceeding 99 tons during any twelve consecutive month period.
[Title V Avoidance]

2.2 The Permittee shall not cause, let, suffer, permit or allow emissions from any manufacturing process that contain visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

2.3 The Permittee shall not cause, let, permit, suffer, or allow the rate of emissions from each manufacturing process particulate matter in total quantities equal to or exceeding the allowable rate calculated as follows:
[391-3-1-.02(2)(e)1(i)]

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour

$E = 55\ P^{0.11} - 40$; for process input weight rate above 30 tons per hour

E = emission rate in pounds per hour
P = process input weight rate in tons per hour, excluding moisture

2.4 The Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning sources at this facility.
[391-3-1-.02(2)(g)2]

2.5 The Permittee may not transfer or cause or allow the transfer of any volatile organic liquid other than gasoline from any delivery vessel into a stationary storage tank of greater than 4,000 gallons unless the tank is equipped with submerged fill pipes.
[391-3-1-.02(2)(vv)1]

2.6 The Permittee shall not cause, let, permit, or allow the emission of nitrogen oxides (NO_X), from the IC engines IC01 - IC24, during the period of May 1 through September 30, to exceed 80ppm @ 15% oxygen on a dry basis.
[391-3-1-.02(2)(mmm)]

2.7 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart JJJJ - " Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," for operation of engines IC01 - IC24.
[40 CFR 60.4230]

2.8 The Permittee shall not cause, let, suffer, permit or allow the rate of emissions from engines IC01 - IC24, subject to 40 CFR 60 Subpart JJJJ, any gases which contain emissions in total quantities exceeding the allowable rate as indicated below:
[40 CFR 60.4233(e) and Table 1 of 40 CFR 60 Subpart JJJJ]

a. NOx emissions in excess of 1.0 g/hp-hr or 82 ppmvd at 15% oxygen

b. CO emissions in excess of 2.0 g/hp-hr or 270 ppmvd at 15% oxygen

c. VOC emissions in excess of 0.7 g/hp-hr or 60 ppmvd at 15% oxygen

The owner and operator of stationary SI ICE may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

2.9 The Permittee shall comply with the 40 CFR 60, Subpart A, "General Provisions" and 40 CFR Part 60 New Source Performance Standards (NSPS) Subpart IIII, "Standards for Stationary Compression Ignition Internal Combustion Engines," for the operation of the emergency generators 1 - 4 (Source Codes EG01 - EG04), as applicable.
[40 CFR 60, Subpart IIII]

2.10 The Permittee shall comply with the 40 CFR 63, Subpart A, "General Provisions" and 40 CFR 63 Subpart ZZZZ –National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), for IC engines IC01 - IC24 and emergency engines EG01 - EG04, by complying with 40 CFR 60 Subpart JJJJ and 40 CFR 60 Subpart IIII, respectively.
[40 CFR 63.6590(c)(1)]

2.11 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60; in particular Subpart A "General Provisions" and Subpart Kb – "Standards of Performance for Volatile Organic Liquid Storage Vessels" (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification commenced after July 23, 1984," for Oil Storage Tanks Nos. 1 - 4 (Source Codes ST01 - ST04). Specifically, the Permittee shall comply with provisions of:

a. Control technology requirements specified in 40 CFR 60.112b

b. Testing procedures specified in 40 CFR 60.113b

c. Reporting and recordkeeping requirements specified in 60.115b

d. Monitoring requirements specified in 60.116b

3. Fugitive Emissions

3.1 The Permittee shall take all reasonable precautions with any operation, process, handling, transportation, or storage facilities to prevent fugitive emissions of air contaminants and maintain visible emissions from fugitive dust below 20%.
[391-3-1-.02(2)(n)2]

4. Process & Control Equipment

4.1 Routine maintenance shall be performed on all air pollution control equipment. Maintenance records shall be in a form suitable for inspection or submittal to the Division and shall be maintained for a period of five (5) years from date of entry.

4.2 The Permittee shall operate the Extruder Scrubbers (Source Codes SC01 - SC16) during all times of extruder operation.

4.3 Each of the emergency generators shall be operated and maintained according to the manufacturer's emission-related written specifications/instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine. In addition, the Permittee shall only change those emission-related settings that are permitted by the manufacturer.
[40 CFR 60.4211(a)]

5. Monitoring

5.1 Any monitoring system installed by the Permittee shall be in continuous operation except during calibration checks, zero and span adjustments, or periods of repair. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.

5.2 The Permittee shall install, calibrate, maintain, and operate indicators on the Extruder Scrubbers (Source Codes SC01 - SC16) for the following:

a. Scrubbant flow rate in gallons per minute (gpm);

b. Differential pressure of the gas stream in inches of water (inches H_2O); and

c. Scrubbant pH.

5.3 The Permittee shall determine and record the scrubbant flow rate (gpm), differential pressure of the gas stream (inches H_2O), and scrubbant pH for the Extruder Scrubber (Source Codes SC01 - SC16) at least once per 8-hour period of facility operation.

5.4 The Permittee shall maintain the presence of the pilot flame of the flares (Source Codes FB01 and FB02). Presence of the pilot flames shall be monitored utilizing a flame rod or equivalent. Data shall be recorded once per 8-hour period of facility operation. In the event of extinguishing of the pilot flames, immediate actions shall be taken to restore the flames.

5.5 The Permittee shall monitor NOx emissions from IC engines IC01 - IC24 between March 1 and May 1 of each calendar year and perform the measurement using the manufacturer recommended settings for reduced NOx emissions. Three test measurements of 30 minutes in duration each are required.
[391-3-1-.02(2)(mmm)]

5.6 Following the annual NOx measurement, from the period May 1 through September 30 of each year, the Permittee shall operate each IC engines IC01 - IC24 using the settings determined during the annual measurement. The Permittee shall certify that no adjustments have been made to the engines by the Permittee and/or any third party since the last successful measurement. This certification shall be made in writing no later than October 15 of each year and shall be maintained with the records required in section 7 of this permit.
[391-3-1-.02(2)(mmm)]

5.7 The Permittee shall install, calibrate, maintain, and operate a system to monitor and record the indicated parameters on each emergency generator. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[CFR 63.6625(f); 40 CFR 60.4209(a)]

a. A non-resettable hour meter to continuously record and track the hours operated during emergency service and the hours operated in non-emergency service (maintenance and/or testing).

b. A system to record the reason the engine was in operation during emergency and/or non-emergency service, and to record the cumulative total hours of emergency operation and non-emergency operation.

c. A system to monitor the generator output load (in kilowatts electric, KWe) from each emergency generator. Data shall be recorded at least each hour the generator is operated. The generator output data shall be used to determine the average monthly measured operating load from each emergency generator.

6. Performance Testing

6.1 The Permittee shall cause to be conducted a performance test at any specified emission point when so directed by the Division. The following provisions shall apply with regard to such tests:

a. All tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants.

b. All test results shall be submitted to the Division within sixty (60) days of the completion of testing.

c. The Permittee shall provide the Division thirty (30) days prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.

d. All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.

6.2 The Permittee should conduct initial performance testing for NOx, CO and VOC in engines IC01 - IC24. Subsequent performance testing is not required unless the stationary engines undergo rebuild, major repair or maintenance.
[40 CFR 60.4243(f)].

6.3 Conduct the performance test specified in Condition 6.2 within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup.
[40 CFR 60.8(a)].

7. Notification, Reporting and Record Keeping Requirements

7.1 The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative. The Permittee shall retain these records for a period of at least five (5) years after the date of any such startup, shutdown, or malfunction.

7.2 Within 45 days of startup of the facility, the Permittee shall submit, to the Division, in writing, the minimum scrubbant flow rate; differential pressure of the gas stream in inches of water; and pH range that represent normal operation of the Extruder Scrubbers (Source Codes SC01 - SC16). These are the value(s) that shall be used to determine reportable deviations in accordance with Condition No. 7.3. Should the scrubbant flow rate, differential pressure, or scrubbant pH value fall outside of the normal operational range(s), the Permittee shall take immediate corrective actions to return the scrubber to normal operation. The Permittee shall record the time of the occurrence, the nature, the cause, and the corrective action of such deviations.

7.3 The Permittee shall submit a written report of reportable incidences for each semiannual period. The report shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28 respectively, and shall contain the nature and cause of the deviation, the time and date of occurrence, and any initial and final corrective action taken. The report shall also contain a summary of any days for which any of the required operation and maintenance surveillance checks were not made and the reason for such failure to perform the surveillance. A reportable incidence is defined as the following:

a. Extruder Scrubbers (SC01 - SC16): Any scrubbant flow rate, differential pressure of the gas stream, or scrubbant pH required by Section 5 of this permit that is outside of the ranges established by Condition 7.2 of this permit.

b. Flares (FB01 and FB02): Any period(s) of loss of the pilot flame.

7.4 The Permittee shall maintain readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of Oil Storage Tanks Nos. 1-4 (Source Codes: ST01-ST04) with a design capacity greater than 75 cubic meters (19,813 gallons).
[40 CFR 60 Subpart Kb]

7.5 The Permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period for Oil Storage Tanks Nos. 1 - 4 (Source Codes ST01 - ST04).
[40 CFR 60 Subpart Kb]

7.6 The Permittee shall submit written notification of startup to the Division within 15 days after such date. The notification shall be submitted to:
Mr. Sean Taylor
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta GA 30354

8. Special Conditions

8.1 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.

8.2 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of the fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Application & Annual Permit Fees."